

Amendments of the Claims:

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (New): A method for characterizing a plurality of members based on a dimensional value of the members, the method comprising the steps of:
 - a) providing a plurality of sensors;
 - b) fixing a set of distances between the sensors;
 - c) moving the plurality of members past each of the plurality of sensors;
 - d) measuring a set of first time segments for each member of the plurality of members to move from a first sensor to a second sensor of the plurality of sensors;
 - e) measuring a set of second time segments for each member of the plurality of members to move completely past a sensor of the plurality of sensors;

- f) computing the dimensional value for each member from the distances multiplied by the second time segments and divided by the first time segments; and
- g) designating each member either a desired part or an undesired part using the dimensional value for the member.

9. (New): The method of claim 8, wherein the members comprise pins.
10. (New): The method of claim 8, wherein the dimensional value comprises the length of the members.
11. (New): The method of claim 8, wherein the plurality of sensors further comprises a third sensor.
12. (New): The method of claim 8 further comprising the step of computing a range from the dimensional values of the plurality of members.
13. (New): The method of claim 8 further comprising the step of separating the desired parts and the undesired parts.
14. (New): The desired parts separated by the method of claim 13.
15. (New): The method of claim 13 further comprising the steps of moving desired parts from the channel to a pass container and moving undesired parts from the channel to a fail container.
16. (New): The method of claim 15, wherein the desired parts comprise pins.
17. (New): The method of claim 8, wherein at least one distance in the set of distances is equal to a dimensional value of the desired part.
18. (New): A characterization device for characterizing a plurality of members based on a dimensional value of the members, the characterization device comprising:
 - a plurality of sensors with a set of fixed distances between the sensors;
 - a plurality of receivers for receiving signals from the sensors;

a channel for directing the plurality of members past the plurality of sensors; and

a microprocessor for receiving time segments recorded by the plurality of receivers, computing a dimensional value for each member, and comparing the dimensional value for each member to a desired value to designate the member either a desired part or an undesired part.

19. (New): The characterization device of claim 18, wherein the members comprise pins.
20. (New): The characterization device of claim 18, wherein the dimensional value comprises the length of the members.
21. (New): The characterization device of claim 18, wherein the plurality of sensors comprises a first sensor and a second sensor.
22. (New): The characterization device of claim 18 further comprising:
 - a first actuator for moving desired parts from the channel to a pass container; and
 - a second actuator for moving undesired parts from the channel to a fail container.
23. (New): The characterization device of claim 22, wherein the desired parts comprise pins.
24. (New): The characterization device of claim 18, wherein at least one distance in the set of distances is equal to a dimensional value of the desired part.
25. (New): A method for characterizing at least one member based on a dimensional value of the member, the method comprising the steps of:
 - a) providing a plurality of sensors;
 - b) fixing a set of distances between the sensors, wherein at least one distance in the set of distances is equal to a dimensional value of at least one desired part;
 - c) moving the plurality of members past each of the plurality of sensors; and

d) sensing the member to determine whether the dimensional value of the member equals the dimensional value of the desired part.

26. The method of claim 25, wherein the members comprise pins.

27. The method of claim 25 further comprising the step of designating the member as the desired part if the dimensional value of the member equals the dimensional value of the desired part.